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U. S. Department of Agriculture - Forest Service  
CENTRAL STATES FOREST EXPERIMENT STATION

Technical Note 42.

November 1, 1941

VOLUME TABLE  $\frac{1}{2}$   
for  
SHORTLEAF PINE  
(*Pinus echinata*)

Jackson and Gallia Counties, Ohio

Merchantable Stem to a Variable Top Diameter					INTERNATIONAL Rule ( $\frac{1}{4}$ " Kerf)		
Diameter breast high outside bark (inches)	Gross volume of stem in 12.3-foot logs to merchantable height					Top d.i.b. at merchantable limit	Basis in trees
	1 log	2 logs	3 logs	4 logs	5 logs		
	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Inches	Number
9	22	41	58			6.8	} 25
10	23	50	72	93		7.0	
11	34	62	88	114		7.4	
12	41	74	106	136		7.8	} 33
13	48	88	126	162	196	8.2	
14	56	103	147	189	230	8.8	
15	66	119	170	219	266	9.4	} 5
16		137	195	251	305	10.1	
17			222	285	346	11.0	
18			251	322	391	11.9	} 1
Basis in trees-- number	12	17	39	3	1	--	72

$\frac{1}{2}$  Trees measured by J. W. Girard in 2-inch diameter classes and in 10- to 16-foot log lengths and scaled as such. Table prepared in 1941 by the equation method. Coefficient of multiple correlation (R) is .975. Band of the standard error of estimate 89.5 to 111.7 percent. Block shows limits of basic data. Statistical assistance furnished by personnel of WPA Official Project No. 65-2-42-296.

The total estimated gross volume of single shortleaf pine trees or stands should be corrected for cull (including defect, sweep, crook, shake, etc.) by a percentage reduction. This percentage should be determined locally through observing the cull elements and through experience of sawmill operators as regards losses from rot, shake, etc., in utilizing this species.

R. E. Emmer

